

# Insurance Brokers Association of Uganda – IBAU

## The Broker's Role in Insurance Growth – The Actuarial Perspective

Kenbright Actuarial and Financial Services Limited

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February 2022



**Insurance Brokers  
Association of Uganda**



# Agenda

Talking Points

- ✓ About Kenbright
- ✓ Key Market Stats
- ✓ Product Development & Pricing
- ✓ Profitability of Insurance Schemes
- ✓ Insurance Actuarial Reserving
- ✓ Insurance Data & Analytics
- ✓ Insurance Financial Reports







# ABOUT KENBRIGHT

- Subsidiary of Kenbright Holdings
    - *Established for 25 years in the East African market*
  - First local Actuarial Company to be registered with IRA
- 



- Second Actuarial Company in the entire African continent to be accredited for Quality Assurance by the Institute and Faculty of Actuaries (UK)



# About Kenbright

Why Kenbright?



## Actuarial Services

Appointed Actuary, Products Design & Pricing, Asset Liability Management, Capital Modelling, Reinsurance Optimization



## IFRS 17 Implementation

PROPHET Actuarial Software Implementation, Training Staff on Actuarial Software



## Regulatory Advisory

Compliance and Liaison, Corporate Governance, Strategy Formulation and Review



## Staff

Fully qualified Actuaries



## Local Availability

On demand access to presentations to Senior Management & the Board



**Insurance Brokers  
Association of Uganda**

**Kenbright Actuarial & Financial Services** – Accredited to provide Actuarial Advisory & Enterprise Risk Management Services

**Kenbright Insurance Brokers** – Licensed to provide Risk & Insurance Advisory Services

**Kenbright Reinsurance Brokers** - Accredited to provide Reinsurance Advisory & Optimization Services

**Kenbright Healthcare Administrators** – Provision of Fund Management & Health Insurance Services

**Pan African Innovations** – Mint, Vehicle & Smart Health



# Other Services

Other Areas for Future Consideration



**Insurance Brokers  
Association of Uganda**

## Financial Condition Report

Annual Financial  
Condition Report in  
accordance with IRA  
requirements

Presentation to Board  
and senior management

## Product Reviews & Development

New products pricing

Existing products'  
performance Actuarial  
reviews

## Risk Management

ERM Framework  
development

Internal policies and  
process reviews

## IFRS 17

Implementation of IFRS  
17 standard

Board & Staff Training



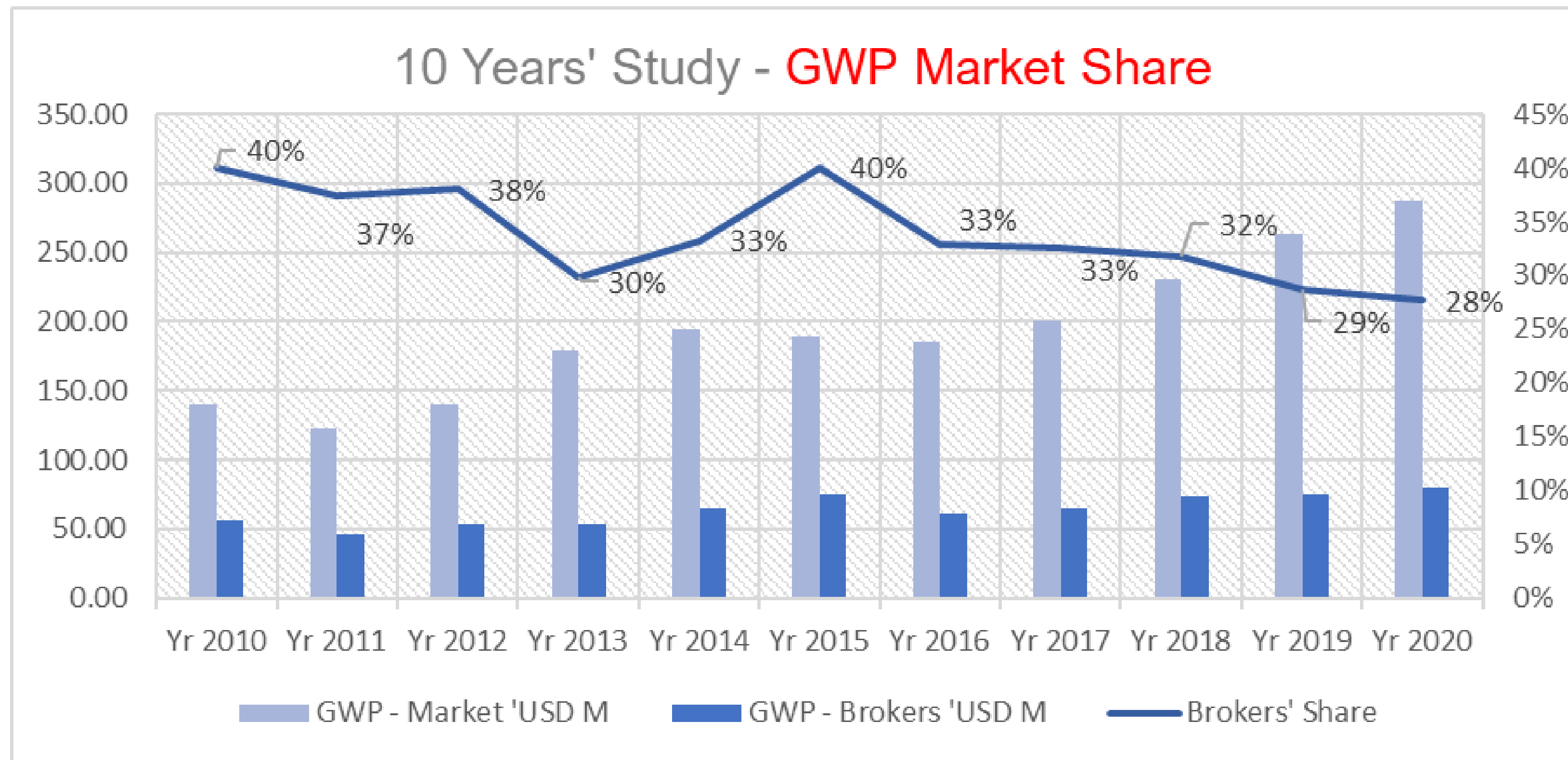
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# Key Market Stats



2020 to 2022 – Strategy No. Six

- Increase Total Market Share of GWP by 21% (From 31% to 53%) by close of 2022



**40%**  
Yr. 2010

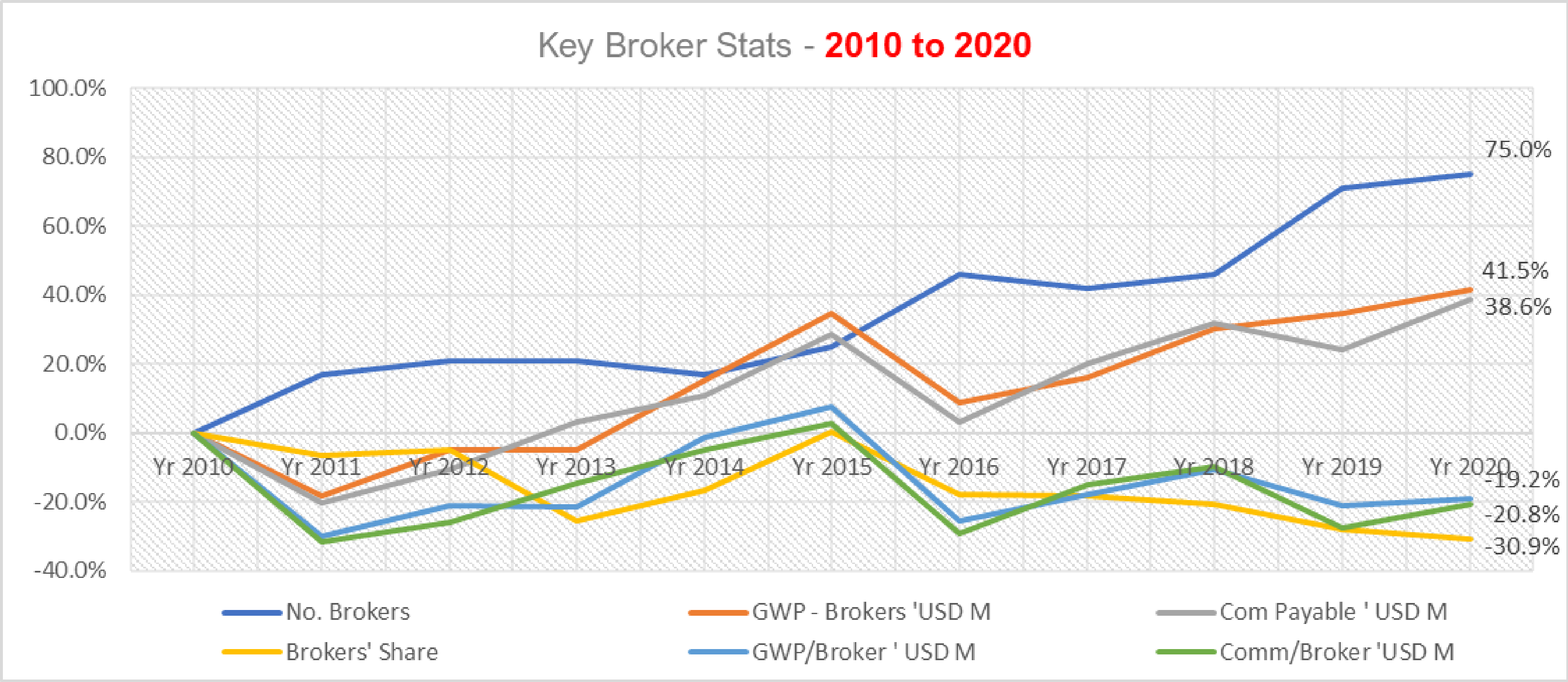
**28%**  
Yr. 2020

Business Year	Yr 2010	Yr 2011	Yr 2012	Yr 2013	Yr 2014	Yr 2015	Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020
GWP - Market 'USD M	140.52	123.08	140.41	179.04	194.38	189.01	185.84	200.00	230.75	262.89	287.53
GWP - Brokers 'USD M	56.21	46.00	53.45	53.36	64.67	75.66	61.16	65.29	73.25	75.57	79.52



# Key Broker Stats

Annual Growth from 2010 Base Year



75%

No. Brokers

42%

GWP by Brokers

39%

Com. for Brokers

(31)%

Brokers GWP Share

(19)%

GWP per Brokers

(21)%

GWP per Brokers

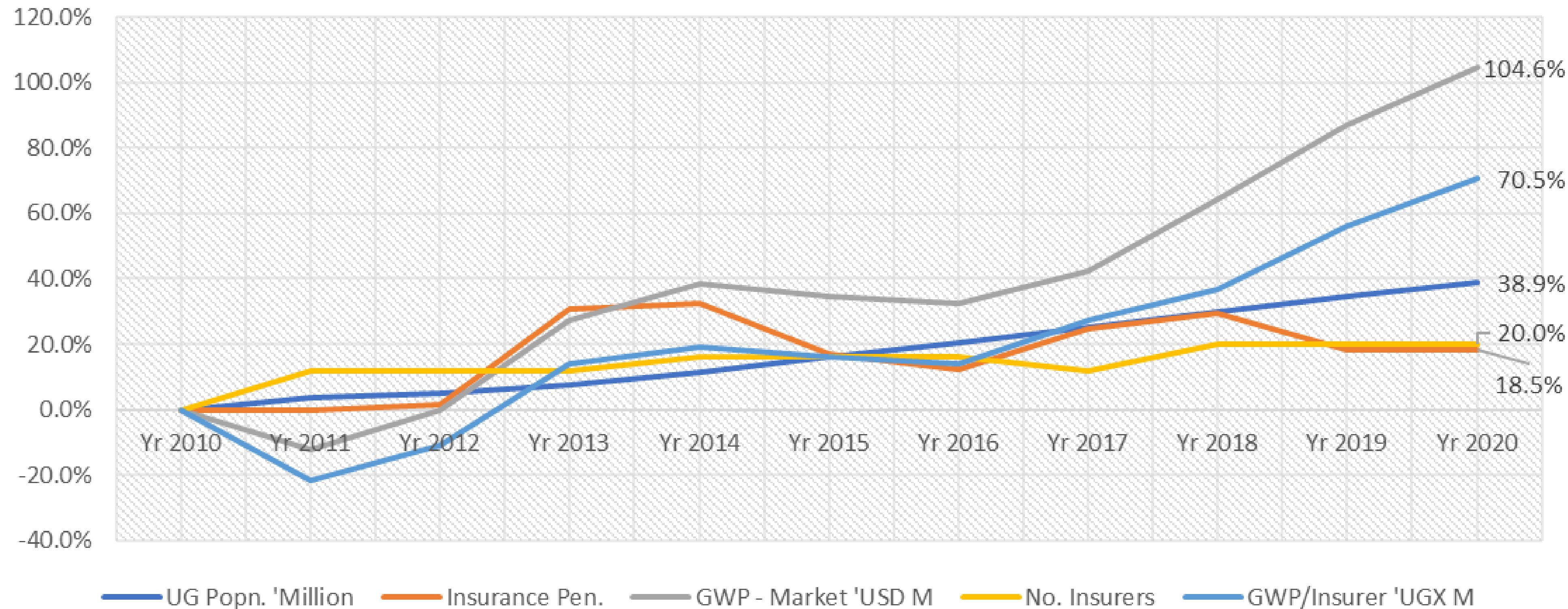


# Key Insurer Stats

Annual Growth from **2010 Base Year**



Key Insurers' Stats - 2010 to 2020



**105%**

GWP Growth

**71%**

GWP per  
Insurer

**39%**

UG's  
Population

**20%**

No. of Insurers

**19%**

Insurance  
Penetration

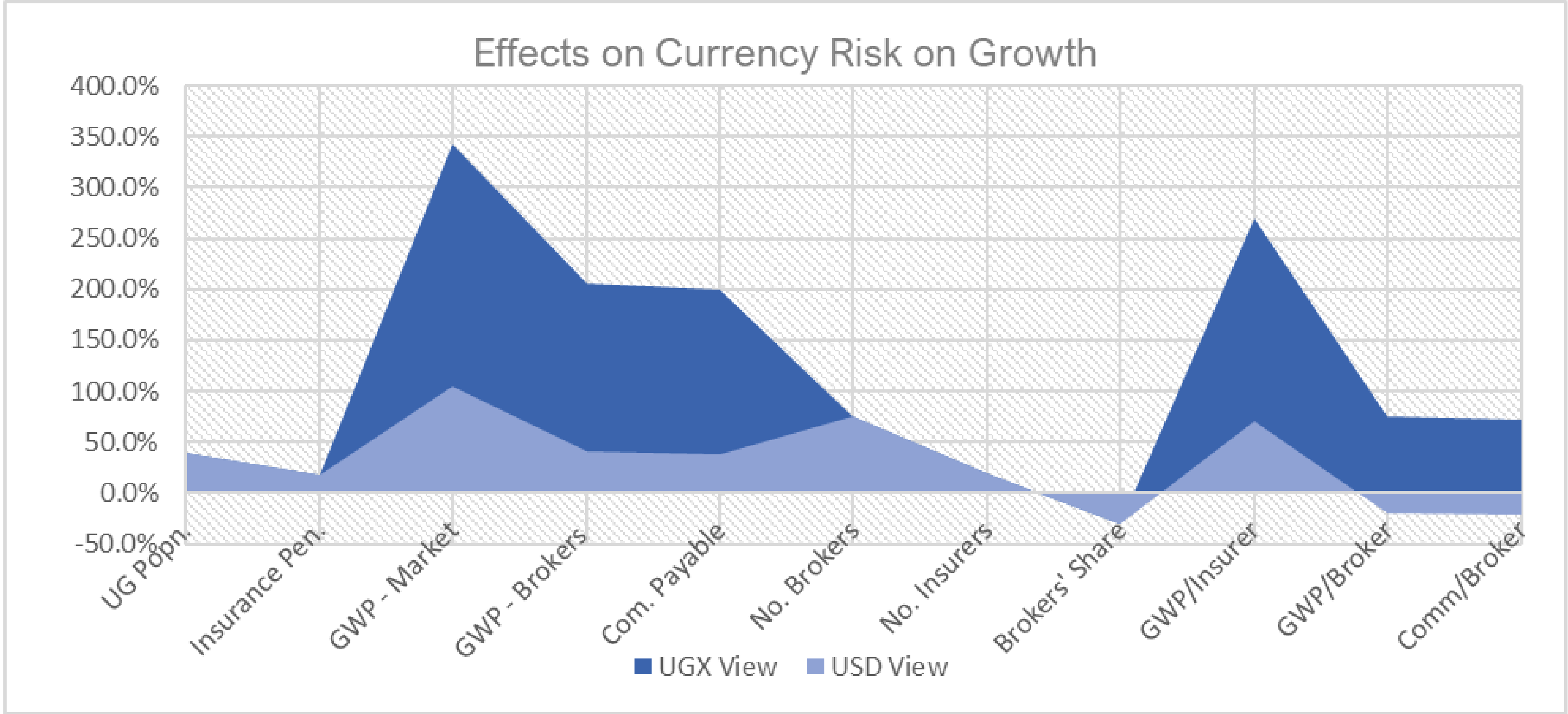
**41%**

GDP Growth



# Currency Risk

Effect on Insurance Growth - 2010 Vs 2020



Business Year	UGX View	USD View	Net Effect
UG Popn.	38.9%	38.9%	Nil
Insurance Pen.	18.5%	18.5%	Nil
GWP - Market	342.9%	104.6%	-238.3%
GWP - Brokers	206.3%	41.5%	-164.8%
Com. Payable	200.0%	38.6%	-161.4%
No. Brokers	75.0%	75.0%	Nil
No. Insurers	20.0%	20.0%	Nil
Brokers' Share	-30.9%	-30.9%	Nil
GWP/Insurer	269.1%	70.5%	-198.6%
GWP/Broker	75.0%	-19.2%	-94.2%
Comm/Broker	71.4%	-20.8%	-92.2%

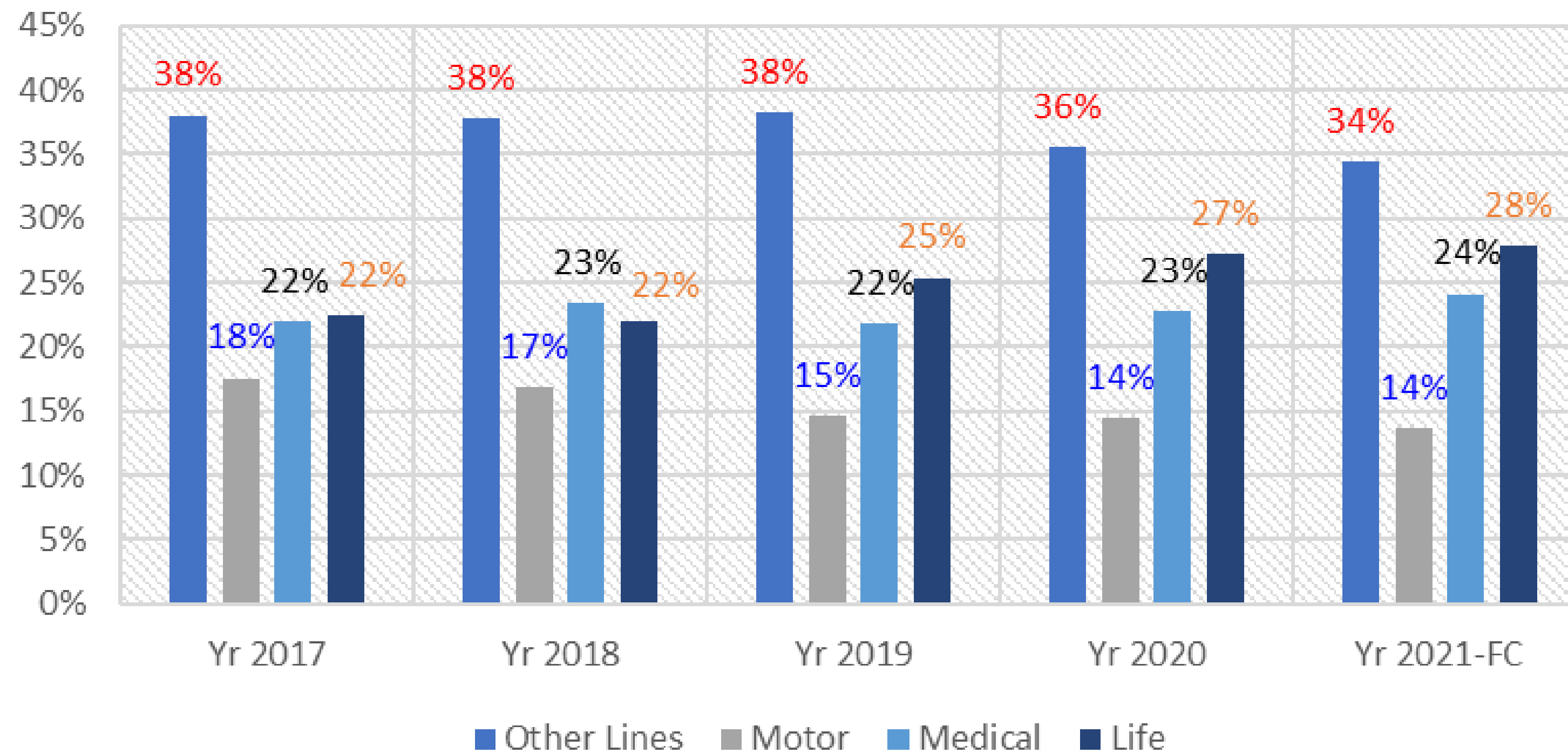
- In UGX, Brokers’ GWP growth in 2020 Vs 2010 is 206%, In USD, this is equivalent to 42% ONLY.



# Product Mix

## Product GWP - 2017 Vs 2021 Fy FC

Product Mix - 5 Years



Product Mix - 5 Years

Product Line	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Yr 2021-FC
Fire	11.9%	11.4%	12.1%	11.4%	8.5%
Burglary	1.7%	1.3%	1.0%	1.1%	1.3%
P. Accident	6.3%	5.0%	5.4%	5.5%	4.2%
Work. Comp	2.1%	1.5%	1.2%	1.2%	0.9%
P.Liability	1.7%	1.9%	1.5%	1.7%	2.0%
Marine/Av.	4.6%	3.9%	4.2%	4.3%	5.3%
Motor	17.6%	16.8%	14.7%	14.4%	13.6%
Bonds	1.3%	1.2%	1.4%	1.5%	1.0%
Engineering	3.8%	4.6%	3.3%	3.8%	3.0%
Medical	14.4%	15.7%	13.8%	15.8%	20.1%
HMO	7.6%	7.7%	7.9%	7.0%	4.0%
Miscell.	4.5%	6.9%	8.2%	5.1%	8.1%
Life Individual	9.5%	8.9%	19.8%	16.7%	17.0%
Life Group	10.1%	11.3%	4.2%	6.6%	6.4%
Deposit Admin	2.9%	1.8%	1.4%	3.9%	4.5%

- Market Share for Medical & Life products is highest in 2021
- Market Share for Motor & Other Lines is lowest in 2021

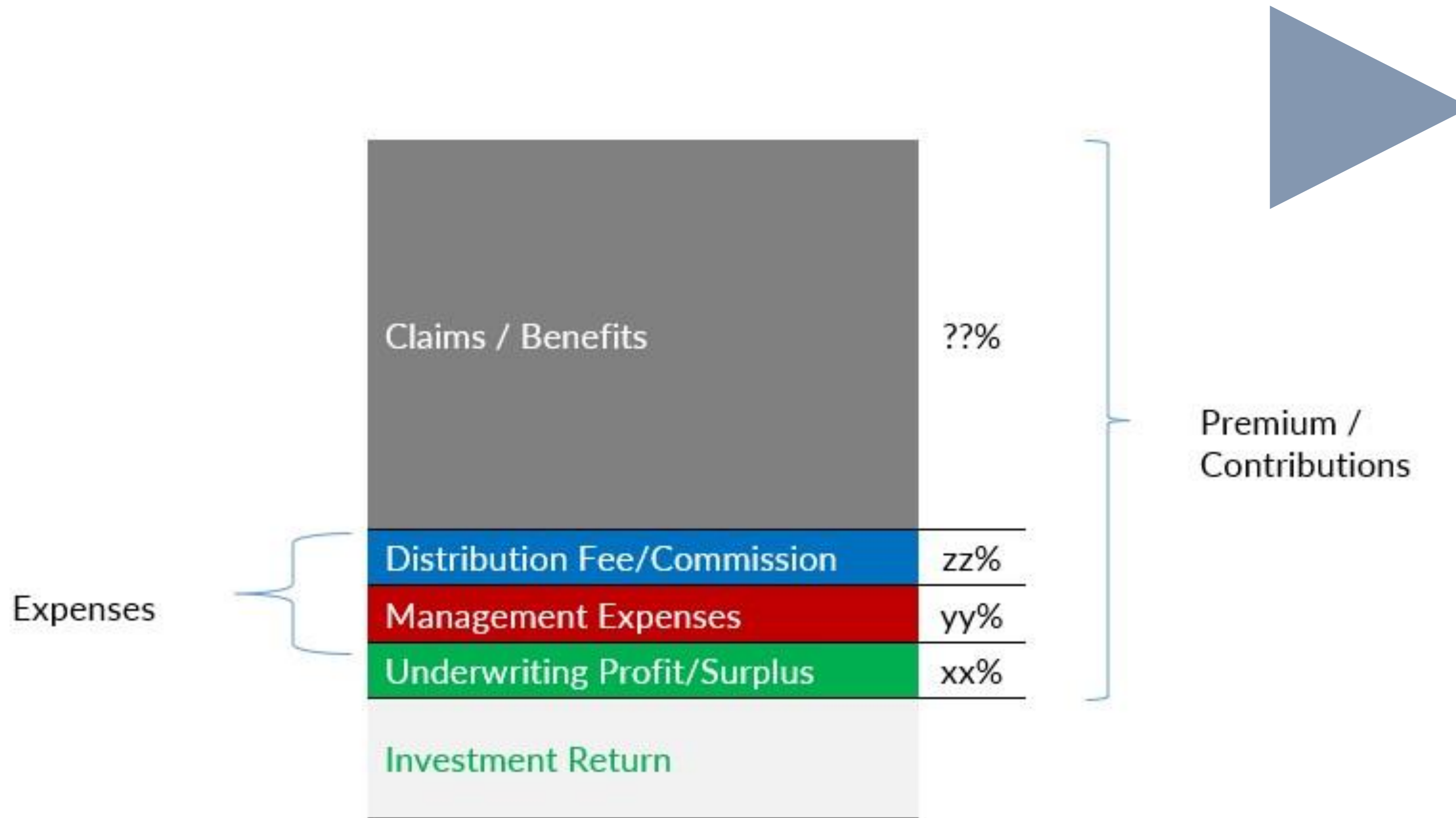


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# Product Development & Pricing

# Key Pricing Parameters

Pricing a profitable Insurance Product



- Clear understanding of this Model from (-) to (+) Underwriting Margin – Risk Based Rating
- Every department **MUST** appreciate this model and how they feed into it.



# Key Insurance Ratios

Indicators of Profitability – General Business Case Study

Key Ratios	INDUSTRY		MARKET LEADER	
	Q3, 2021	Q3, 2020	Q3, 2021	Q3, 2020
Retention Ratio	53.4%	55.3%	68.2%	67.2%
Claims Ratio	53.7%	43.6%	66.0%	56.1%
Mgt Expense Ratio	36.8%	40.0%	22.4%	23.7%
Com Ratio	-8.4%	-8.5%	-8.8%	-8.7%
Combined Ratio	82.1%	75.0%	79.7%	71.0%

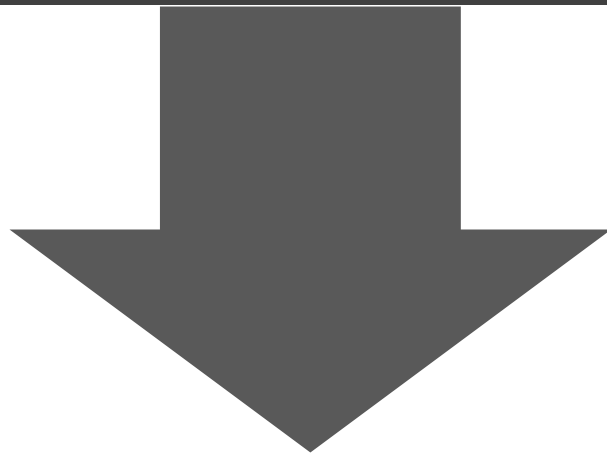


- Retention Ratio **(A)** - % of risk premium that the Insurer doesn't cede to the Reinsurer
- Claims Ratio **(B)** - % of risk premium that the Insurer pays out in Claim Expenses
- Management Expense Ratio **(C)** - % of risk premium that the Insurer uses to pay for Office, operational, Marketing & Staff Expenses.
- Commission Ratio **(D)** - % of risk premium that is paid off to intermediaries for business development (Can be (-) is Reinsurance Commission is higher than the Commission expense).
- Combined Ratio **(B)+(C)+(D)** – If Equal to 1 (**Breakeven**), If Less than 1 (**Profitable**), If Greater than 1 (**Loss Making**).

# The Retail Problem

Individual Life vs Individual Medical

Industry	Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Growth	
						3Yr	5Yr
Total Life	132.5	170.1	220.6	269.2	324.2	47.0%	144.7%
Individual Life	50.2	65.7	75.8	190.8	177.5	134.1%	254.0%
Prudential Individual Life	2.0	6.5	16.6	26.7	44.3	166.8%	2125.7%
Individual Medical	2.7	3.2	4.1	4.5	4.8	18.6%	76.3%



## WHAT WENT WRONG?

### Key Facts

- Individual Life now forms over 70% of entire Medical insurance Industry
- Only 5,000 Lives with Retail Medical Insurance Policies
- BUPA, CIGNA, ALLIANZ, AETNA, having market share – Retail
- What are we developing for the Retail Space in Uganda?
- A need for Key Synergies, Partnerships & Aggregation? Bancassurance & Brokers





Scheme Aspects	Status
The Bill	Bill stage- Passed by Parliament in Draft Form - Pending Cabinet Review
Contribution to the scheme	Members' contributions – 4% of gross salary/wages Employers' contributions – 1% of gross salary Informal Sector (Self employed) - UGX 100,000 Annually Retired (Pensioners) - 1% of monthly pension Not employed (Poor, orphans, PwDs) - zero contribution Other sources, including Donor Funds, Loans, GoU
Benefit Package	Unspecified Minimum Package - Benefits / Limits yet to be determined
Target Market	Formal Sector (Government Employees) Formal Sector (Private Sector Employees) Informal Sector (Self Employed) Retired (Pensioners) Not employed (Poor, orphans, PwDs)
Provider Network	All Government Hospitals and Health Centres Privately Facilities & Non-Gov't facilities accredited based on scheme affordability Might offer high copayments on high cost providers
Coexistence with Private Insurers	Potential for Providing supplementary medical insurance cover Association Advantage - Good for Sensitization Lots of untapped Market - A call for Targeted Innovation

- Further Actuarial Feasibility Study to be done
- No Light in the Short term for Implementation
- Insurers to maximize the opportunities around this uncertain wave- **Innovation to tap into the Mass Markets.**

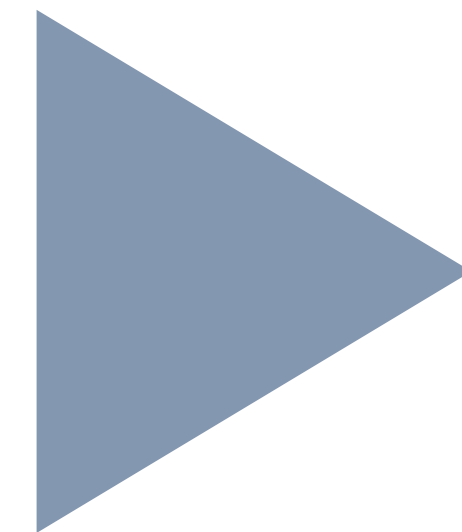
## Key Stats - Market Potential

Total Population	47,279,712, 2021 Est
Total Adult Population	22,285,035, 2020 Est
Population below 18 Years	24,994,677, 2020 Est
Private Health Insurance Uganda	UGX 241.6 Billion, 2020 Est
PruMed	UGX 37.3 Billion - 52,000 Lives
No. Insureds on Private Health Insurance	375,000, 2020 Est
Size of Informal Sector	2,500,000, 2020 Est
Size of Public Sector	778,500
No. of Civil Servants- GoU	319,000
No. of SME's - UIA Registered	800,000
No. of Teachers - (Primary)	202,617
No. of Secondary Schools	3,220
No. of Primary Schools	20,314
No. of Universities	53
No. of Teachers - (Tertiary)	58,100
No. of PAYE Contributors	1,594,116, 2019 Est
No. of UPDF	46,800, 2019 Est
No. of Police	44,897, 2015 Est
No. of Health Workers	107,000, 2019 Est

Less than 1% of Ugandans on Private Medical Insurance

How else can we make our Motor Insurance affordable???

What else can we cross sale with Motor Insurance???



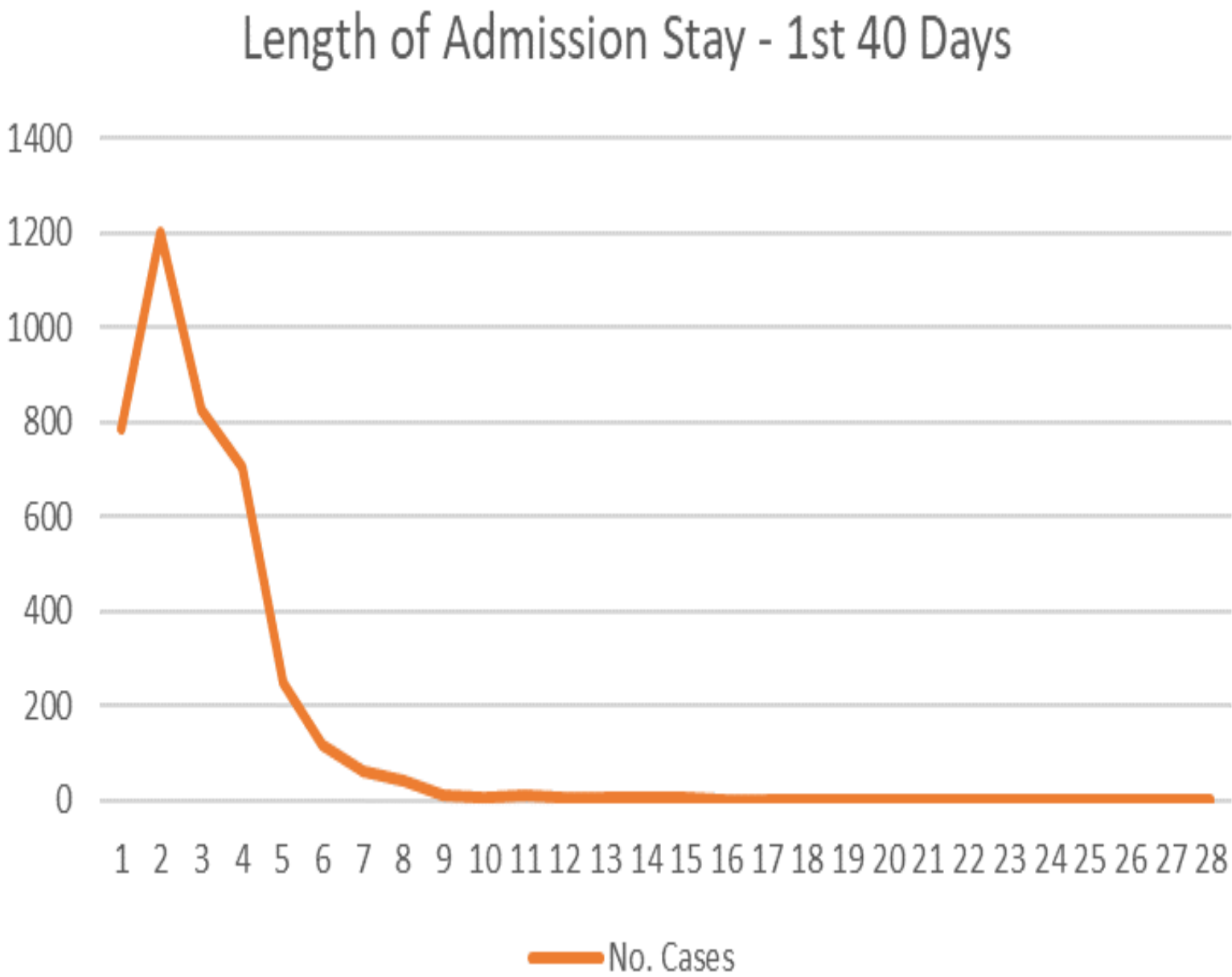


• Key Assumptions

- Inpatient Admission rate of 12% per annum
- Length of Stay Trends (*chart*)
- Target Loss Ratio – 50%

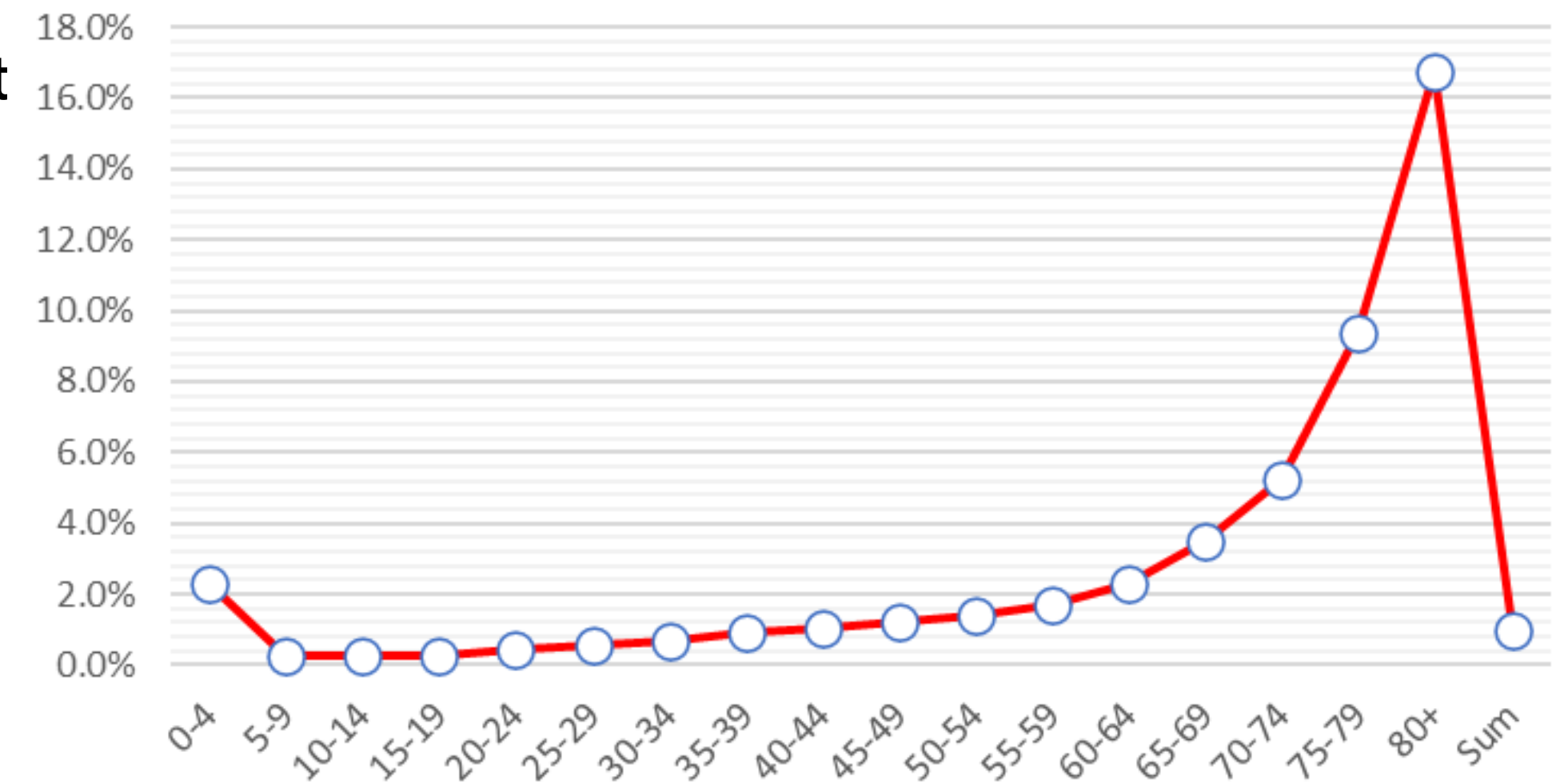
• Annual Premium

- UGX10,800 for a Daily Benefit of UGX10,000  
.....  
....  
..
- UGX158,400 for a Daily Benefit of UGX150,000



- **Trigger-** Death
- **Benefit Payout-** Fixed Payment
- **Use of Third Parties-** Limited – Burial Permit is a government –issued document
- **Key Advantages**
  - Simple and easy to understand & digitize
  - Relatively cheap & easy to bundle
- **Key Disadvantage**
  - Stigma
- **Scope**
  - Pays a death benefit within 48hours on confirmation of death (*using a burial permit*) of the insured member. Age limit – usually a maximum of 70 years on entry.
- **Limits**
  - Ranging Between UGX500,000 - UGX10,000,000
- **NO Exclusions (With Reinsurer's confirmation)**
- **Key Assumptions**
  - Average Death Rate per annum – 10 per mille, Target Loss Ratio – 40%

Mortality Rate 0 to 80 Years





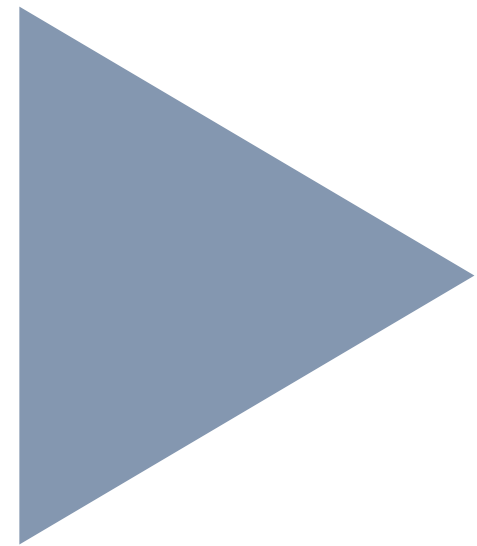
- **Trigger-** Diagnosis of specified conditions
- **Benefit Payout-** Fixed Payment
- **Use of Third Parties-** Hospital/ Specialist to confirm diagnosis
- **Key Advantages**
  - Relatively cheap & easy to bundle
- **Key Disadvantage**
  - Limited conditions covered
- **Scope**
  - Bundled with Hospital Cash (due to licensing limitations)
  - Pays a fixed benefit within 48hours on confirmation of diagnosis (using a burial permit) of the insured member. Age limit – usually a maximum of 70 years on entry.
- **Limits**
  - Ranging Between UGX500,000 - UGX7,500,000
- **NO Exclusions (? To Confirm with Reinsurer)**
- **Key Assumptions**
  - Average Diagnosis Rate per annum –15 per mille, Target Loss Ratio – 50%

- **Annual Premium**
  - UGX16,500 for a Critical Illness  
Benefit of UGX500,000
  - .....
  - ..
  - UGX247,500 for a Critical Illness  
Benefit of UGX7,500,000



Affordability matched with Profitability – Others

- Accident Only Plans
- Illness Only Plans
- Inpatient Only Plans
- Motor Microinsurance Plans
- **Combination – All above**



- Vehicle Type Risk Profiling
- Motor Accident Inpatient Plans that only cover a specific journey
- **Motor Comprehensive Plans tailored for specific journeys.**
- A shift from Business Retention to New Business Development – *Award better commission to New-New Acquired business*





# INSURANCE ACTUARIAL RESERVING



# Key Actuarial Technical Reserves

Indicators of Financial Strength

Reserves are computed through Actuarial Valuation normally quarterly or on an annual basis by the Actuarial Function of the Business.

Reserve Type	Methodology	Rationale
Claim Reserves		
Outstanding Claim Reserve (OCR)	Case Estimate Method	For Claims reported by policy holders but Not yet settled by the Insurer
Incurred But Not Reported Reserve (IBNR)	Chain Ladder, Average Cost per Claim Method (ACPC) & Bornhuetter-Ferguson	For Claims Incurred by policy holders but Not yet Reported to the Insurer
Premium Reserves		
Unearned Premium Reserve (UPR)	"365ths" method or "24ths" method for gross premium	For Insurer's premium portion that can be claimed by policy holders in the unfortunate closure of the Insurer.
Additional Unexpired Risk Reserve (AURR)	Estimated value of future claim to be incurred in unexpired exposure periods less ('UPR')	For claims portion that exceeds the unexpired portion of premiums for running policies



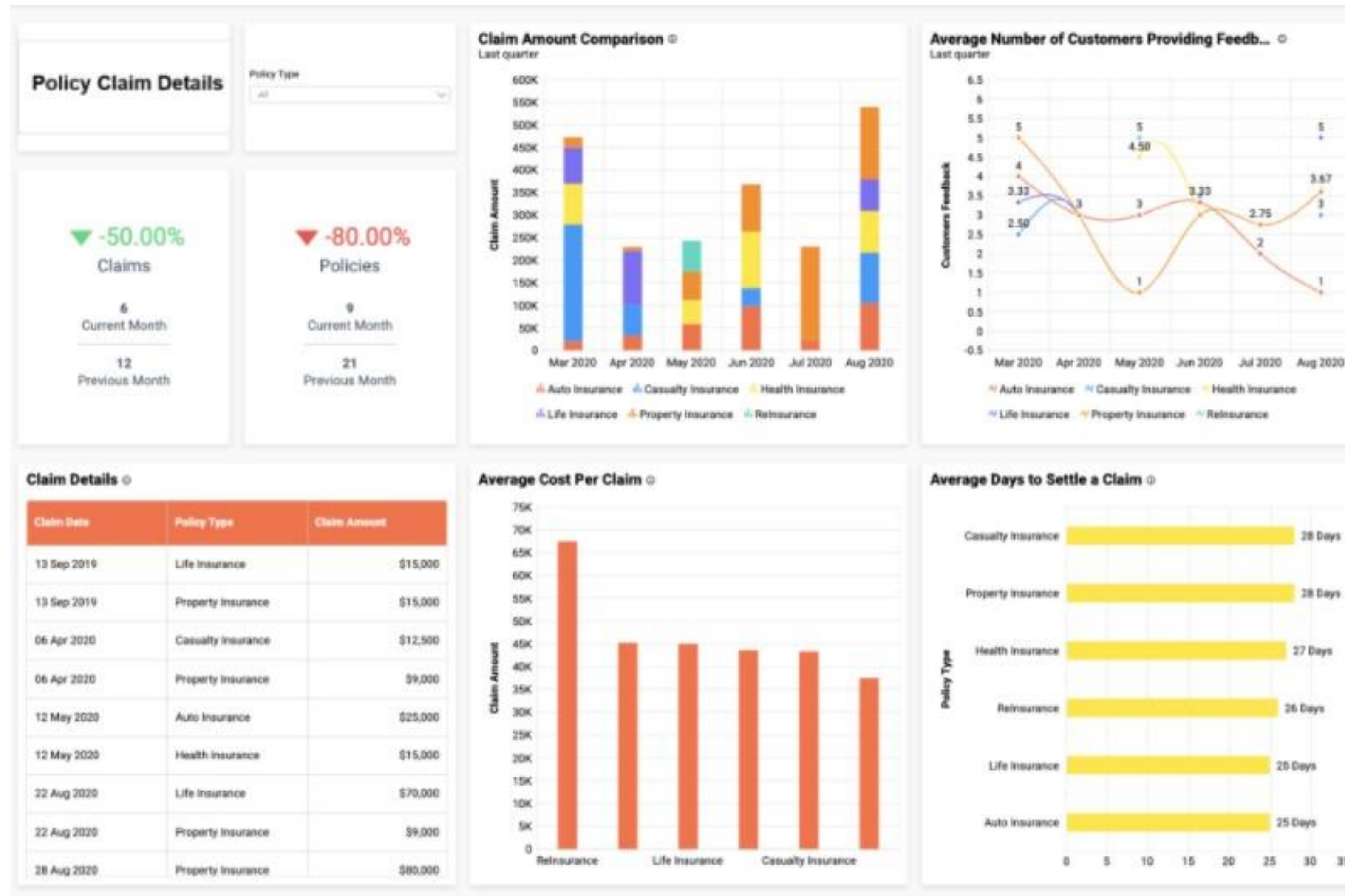




# INSURANCE DATA ANALYTICS



Key parameters can be monitored by the Actuarial Function of the Business daily, monthly, quarterly or annually



Claim  
Parameters



Pricing  
Parameters



Demographic  
Parameters





# INSURANCE FINANCIAL REPORTS

Computed by the Accounting Function in  
liaison with the Actuarial Function

Financial Parameter	Value
Gross written premiums-new	(A)
Gross written premiums-renewal	(B)
<b>Gross written premiums</b>	<b>(C)=(A)+(B)</b>
Unearned premium	(D)
<b>Gross earned premium</b>	<b>(E)=(C)+(D)</b>
Premiums ceded to reinsurers	(F)
<b>Net earned premium</b>	<b>(G)=(E)-(F)</b>
<b>Fees and commission income</b>	<b>Commission from Reinsurers -X0</b>
Investment income	X1
Other operating income	X2
<b>Total income</b>	<b>(H)=X0+X1+X2</b>
Gross benefits and claims incurred	(I)
Claims ceded to reinsurers	(J)
<b>Net claims incurred</b>	<b>(K)=(I)-(J)</b>

Financial Parameter	Value
<b>Commissions payable</b>	<b>Commission to Brokers -(L)</b>
Operating expenses	(M)
Selling and distribution expenses	X3
Finance costs	X4
<b>Profit before tax</b>	<b>(N)=(H)-(K+M+L+X3+X4)</b>
Investment income	(Y)
<b>Underwriting profit</b>	<b>(P)=(N)-(Y)</b>
<b>Gross Ratios</b>	
Claims ratio	(Q)=(I)/(E)
Commission ratio	(R)=(L)/(E)
Management expense ratio	(S)=(M+X3+X4)/(E)
<b>Combined ratio</b>	<b>(T)=(Q+R+S)</b>
Underwriting profit margin	(U)=1-(T)
Profit before tax margin	(V)=(N)/(H)

Ratios computed  
both on Gross &  
Net of  
Reinsurance



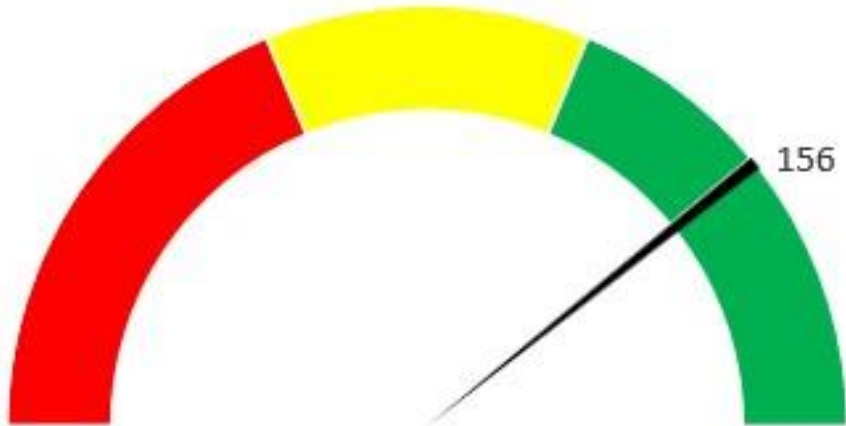


(A) should be equal to (D)

Financial Parameter	Value
<b>ASSETS</b>	
Property and equipment	
Right of use asset	
Intangible assets	
Government securities	
Deposits with financial institutions	
Corporate bonds	
Deferred tax asset	
Current income tax	
Insurance receivables	
Receiveables arising out of reinsurance arrangements	
Reinsurer's share of reinsurance liabilities and provisions	
Amounts receivable under fund administration contracts	
Deferred acquisition costs	
Other receivables	
Inventory	
Amounts due from related parties	
Cash and bank balances	
<b>TOTAL ASSETS</b>	<b>(A)</b>

Financial Parameter	Value
<b>EQUITY</b>	
Share capital	
Share premium reserve	
Contingency reserve	
Accumulated losses	
Profit for the year	
<b>TOTAL EQUITY</b>	<b>(B)</b>
<b>LIABILITIES</b>	
<i>Insurance contract liabilities</i>	
<i>Provision for unearned premiums:</i>	
Amounts payable under fund administration contracts	
Payables arising out of reinsurance arrangement	
Current income tax	
Other payables	
Lease liability	
Amount due to related parties	
Profit before tax margin	
<b>TOTAL LIABILITIES</b>	<b>(C)</b>
<b>LIABILITIES+EQUITY</b>	<b>(D)=(B)+(C)</b>

Capital Adequacy Ratio - CAR



$$CAR = \frac{Available\ Capital}{Required\ Capital}$$

Computed by the Accounting  
Function in liaison with the  
Actuarial Function



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